
Pollution Investigator (ED)



Performance Qualification System (PQS) Workbook

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Marine Safety Training Guide

Pollution Investigator

Qualification Code (ED)

This booklet is one section of your personal 'on the job' (OJT) manual. It represents your on-the-job guide to qualification as a Pollution Investigator. Your responsibility for documenting completed unit training items is self-explanatory. For OJT, a person already holding this qualification code (called a verifying officer) is to observe you perform each item and sign in the appropriate space provided in your booklet. It may be necessary to perform a task several times. The verifying officer will not give credit for any task that is not performed satisfactorily.

Multiple verifying officers may make entries in your manual. Every verifying officer must enter his or her name, rate/rank, signature, and initials in the Record of Verifying Officers section.

When you have completed all of the items required by your command for this qualification, your command will issue a letter of designation. Your personnel department ('Admin') will enter the appropriate code in your PDR, to be reflected in your Personal Data Extract (PDE).

Pollution Investigator (ED) Training Requirements:

(Optional items are at the discretion of individual commands)

	Date Completed	Verifying Officer:
A. Completion of resident training courses (attach copy of completion certificates):		
1. Entry Level Port Operations Course (ELPOC)	_____	_____
Or		
Marine Science Technician "A" School (MST "A")	_____	_____
2. Initial Indoctrination for Port Operations (IIPO) correspondence course.	_____	_____
3. HMIR or other HAZWOPR equivalent.	_____	_____
4. Oil Spill Control School (<i>optional</i>).	_____	_____
B. Completion of PQS Manual.	_____	_____
C. Oral board (unit level) – Pollution Investigator.	_____	_____
D. Completed package with documentation submitted to Training Officer/Coordinator for review.	_____	_____

All qualification requirements have been satisfactorily completed.

_____	_____
Training Officer/Coordinator	Date

Record of Verifying Officers:

<i>Date:</i>	<i>Name/Signature:</i>	<i>Initials:</i>	<i>Rate/Rank:</i>

References:

The following references will aid you in completing the majority of tasking in this manual:

- The Marine Safety Manuals, COMDTINST M16000 (series).
- Guidance and Procedures for Administering and Enforcing the Oily Waste Reception Facility Program, COMDTINST M16450.27.
- Civil Penalty Procedures and Administration, COMDTINST 16200.3 (series).
- U. S. Coast Guard Federal On Scene Coordinator (FOSC) Finance and Resource Management Field Guide (FFARM Guide).
- Chemical Hazards Response Information System (CHRIS), COMDTINST M16465.12C.
- The Federal Water Pollution Control Act (FWPCA), as amended.
- The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended.
- The International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78).
- Refuse Act.
- 29 CFR 1910.120.
- 33 CFR 2, 6, 88, 130, 135, 153, 154, 155, 156, and 160.
- 40 CFR 260-265, 279, 300, 300 App., 302, 310, and 355.
- 49 CFR 172.101 App., 173, 172.6 and 172.7
- U. S. Coast Guard Marine Safety Laboratories "Oil Spill Sample Handling and Transmittal Guide."
- NIOSH Pocket Guide to Chemical Hazards.
- "Threshold Limit Values for Chemical Substances and Physical Agents," ACGIH.
- DOT "Emergency Response Guidebook."

ED Tasks – Authorities and Jurisdiction

<i>Task No.</i>	<i>OJT Task</i>	<i>Date Completed</i>	<i>Verifying Officer's Initials</i>
ED1.	List the laws applicable to conducting pollution investigations as a member of the Coast Guard.	_____	_____
ED2.	For each of the laws listed in ED1, state the intent of the law and identify it as either an amendment to an existing law or a primary statute.	_____	_____
ED3.	Define “harmful quantity” and “reportable quantity” as they apply to oil and hazardous materials under the FWPCA and CERCLA.	_____	_____
ED4.	Define “Navigable Waterway” and state where the specific navigable waterways of a Captain of the Port jurisdiction would be listed.	_____	_____
ED5.	Describe the occasions and policies for entry to private property. (MSM Vol. VI)	_____	_____
ED6.	Identify the jurisdictional limits of the following pollution laws enforced by the Coast Guard:		
	a. Clean Water Act.	_____	_____
	b. Refuse Act.	_____	_____
	c. MARPOL 73/78.	_____	_____
	d. CERCLA.	_____	_____
ED7.	Describe the effect of a Letter of Undertaking, including when such a document would be executed, what for of surety would be required, and the applicable authority for its issuance.	_____	_____
ED8.	Describe a Captain of the Port Order, including any limitations on what such an order may require, and the applicable authority for its issuance.	_____	_____

ED Tasks – Discovery/Notification & Pollution Reporting

<i>Task No.</i>	<i>OJT Task</i>	<i>Date Completed</i>	<i>Verifying Officer's Initials</i>
ED9.	Describe the types of pollution incidents requiring reports and identify the applicable laws/regulations. (CWA Sections 311(b)(5) & 311(b)(6); Refuse Act; MARPOL 73/78 33 CFR 153.201; MSM Vol. V; CERCLA (SARA) Section 103 (b))	_____	_____
ED10.	List possible sources of pollution reports and means of reporting. (40 CFR 300.125; 40 CFR 300.300; 40 CFR 405)	_____	_____
ED11.	State the information to be gathered during an initial report of the discovery of a spill or discharge. (MSM Vol V; MARPOL 73/78; COMDTINST M16450.27)	_____	_____
ED12.	Define the documentation requirements of an initial report of a discharge or release. (MARPOL 73/78; COMDTINST M16450.27; MSM Vol. V)	_____	_____
ED13.	Describe the importance of the following factors in identifying a potential responsible party for a reported pollution incident:		
	a. Substance characteristics.	_____	_____
	b. Physical location.	_____	_____
	c. Weather conditions.	_____	_____
	d. Source characteristics.	_____	_____
	e. Human health and welfare.	_____	_____
	f. Weathering effects of pollutant.	_____	_____
	g. Responsible party's history.	_____	_____
ED14.	List the possible courses of action upon receipt of an initial report of pollution. (MSM Vol. V; MSM Vol. VI; MARPOL 73/78; COMDTINST M16450.27)	_____	_____
ED15.	Take two initial reports of pollution incidents and choose the proper courses of action. (Enter each case in the case log at the back of this PQS.)	_____ _____	_____ _____

ED Tasks – Investigate Pollution Incidents: Evidence

<i>Task No.</i>	<i>OJT Task</i>	<i>Date Completed</i>	<i>Verifying Officer's Initials</i>
ED16.	List and describe the rules of evidence as they pertain to pollution investigation (both criminal and civil).	_____	_____
ED17.	Describe the warnings and notices of rights to witnesses given during a pollution violation. (MSM Vol. V)	_____	_____
ED18.	Describe the protection afforded to witnesses providing statements in a civil pollution violation case.	_____	_____
ED19.	Describe each of the following types of information and evidence that could be used in a pollution investigation. Specify what elements should be included in each case.		
	a. Photographs/video tape.	_____	_____
	b. Diagrams/charts.	_____	_____
	c. Statements/interviews.	_____	_____
	d. Samples, including analysis by the Marine Safety Laboratory.	_____	_____
	e. Vessel/facility logs.	_____	_____
	f. Procedures and documents required by regulations.	_____	_____
	g. Other information and evidence. (MSM Vol. V; MSL Procedures Guide)	_____	_____
ED20.	List the elements that comprise an acceptable witness statement for each of the five types.	_____	_____
ED21.	Describe the procedures for obtaining samples, photographs, and other real evidence, including Chain of Custody requirements. (MSM Vol. V; MARPOL 73/78; COMDTINST M15450.27)	_____	_____
ED22.	Explain the use and importance of the CG3639A.	_____	_____
ED23.	List the types of samples necessary to provide the Marine Safety Laboratory with sufficient physical evidence to perform 'fingerprint' identification.	_____	_____
ED24.	Demonstrate the procedures for gathering necessary information and documentation to support a pollution violation.	_____	_____
ED25.	Demonstrate the procedures necessary to take valid samples of oil for an analysis (both sheen and heavy concentration).	_____	_____

ED Tasks – Investigate Pollution Incidents: Civil Penalty Procedures and Administration

<i>Task No.</i>	<i>OJT Task</i>	<i>Date Completed</i>	<i>Verifying Officer's Initials</i>
ED26.	List and describe the elements of a Civil Pollution Violation under the CWA and CERCLA. (MSM Vol. V)	_____	_____
ED27.	Describe the additional elements for a failure to notify violations. (MSM Vol. V; 33 CFR 153.205; CWA Section 311(b)(5); CERCLA Section 103)	_____	_____
ED28.	Describe the elements of a Class II Civil Penalty violation..	_____	_____
ED29.	Describe the elements of a Criminal pollution violation.	_____	_____
ED30.	Describe the elements of a Criminal Refuse Act violation.	_____	_____
ED31.	Define and describe the differences in the level of proof required for civil and criminal cases.	_____	_____
ED32.	Define each of the following penalty procedures and list the circumstances in which each might be applied:		
	a. A local (or "COTP") Letter of Warning	_____	_____
	b. A COMDT Letter of Warning.	_____	_____
	c. A Notice of Violation.	_____	_____
	d. A Report of Violation.	_____	_____
ED33.	Given a sample Report of Violation, correctly determine the recommended penalty level using appropriate Commandant and unit instructions.	_____	_____

**ED Tasks – Investigate Pollution Incidents:
Marine Safety Information System (MSIS)**

<i>Task No.</i>	<i>OJT Task</i>	<i>Date Completed</i>	<i>Verifying Officer's Initials</i>
ED34.	Describe what each of the following MSIS product sets are used for:		
	a. PNEI	_____	_____
	b. Marine Casualty Product Set	_____	_____
	c. Marine Violation Product Set	_____	_____
	d. Notice of Violation Product Set	_____	_____
ED35.	Demonstrate the ability to fully complete data entry for a pollution incident for the following MSIS product sets:		
	a. Marine Casualty Product Set	_____	_____
	b. Marine Violation Product Set	_____	_____
	c. Notice of Violation Product Set	_____	_____

ED Tasks – Investigate Pollution Incidents: Case File Preparation

<i>Task No.</i>	<i>OJT Task</i>	<i>Date Completed</i>	<i>Verifying Officer's Initials</i>
ED36.	Outline the required contents of a pollution case file, including the applicable tracking and identification documents and/or labeling to be applied to each.	_____	_____
ED37.	Describe the correct routing for a completed pollution case file, from the investigator to the final action office.	_____	_____
ED38.	State the storage and disposal requirements for pollution investigation documents. (MSM Vol. V)	_____	_____
ED39.	Prepare (from initial investigation through dispatch to the appropriate final authority) at least one of each of the following (ensure that each case is logged in the Incident Investigation Log at the end of this PQS):		
	a. A local (or "COTP") Letter of Warning.	_____	_____
	b. A Notice of Violation.	_____	_____
	c. A Report of Violation.	_____	_____

ED Tasks – Investigate Pollution Incidents: Safety

Task No.	OJT Task	Date Completed	Verifying Officer's Initials
ED40.	Determine the exposure risk of each of the following tasks:		
	a. Supervision of pollution response.	_____	_____
	b. Observation of pollution response at a distance.	_____	_____
	c. Back-up support for a response (on site).	_____	_____
	d. Direct contact during a response (oil).	_____	_____
	e. Direct contact during a response (chemical).	_____	_____
ED41.	Define the following characteristics which may be considered prior to and during a spill response and investigation:		
	a. Hazard Class	_____	_____
	b. Reactivity	_____	_____
	c. Physical State	_____	_____
	d. Specific Gravity	_____	_____
	e. Vapor Density	_____	_____
	f. Paths (or Routes) of Entry	_____	_____
	g. TLV/REL/PEL	_____	_____
	h. STEL	_____	_____
	i. IDLH	_____	_____
	j. LC50/LD50	_____	_____
	k. Bioaccumulation	_____	_____
	l. Bio-oxygen Demand	_____	_____
	m. LEL/UEL & LFL/UFL	_____	_____
	n. Flash Point	_____	_____
	o. Vapor Pressure	_____	_____
	p. Boiling Point	_____	_____
	q. Benzene	_____	_____
	r. Hydrogen Sulfide (H ₂ S)	_____	_____
	s. Polynuclear aromatic hydrocarbons (PAHs)	_____	_____
	(CHRIS Manual, NIOSH Pocket Guide, ACGIH Pamphlet, DOT Emergency Response Guide)		
ED42.	State and define the maximum level of protection which (by Commandant Policy) may be used during the course of an investigation.	_____	_____

ED Tasks – Incident Investigation Log

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